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REPORT ON THE RESURVEY OF THE NORTH THORNE RIVER SALE AREA

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Sport Fish Division

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This report, prepared by a Fish and Game representative, should not be considered as department policy. It is intended as a analysis in the progress in the protection of fishery resources during logging.

On May 14 and 15, 1976, Steve Haavig and I conducted evaluations of the North Thorne River sale area. This was a resurvey effort following initial I.D.T. planning in 1972. At that time biologist Rick Reed made the recommendations for protection of sport fish and recreational fishing included here.

EVALUATION OF INITIAL RECOMMENDATIONS

Five recommendations were made by Sport Fish Division to the U.S.F.S. after field work in June of 1972. The original recommendation will be shown, then any applicable quidelines in the Forest Service Planning unit report, and finally the findings during our resurvey.

1. Sport Fish recommendation:

   Portions of stream channels approaching valley walls should be deferred from logging if soils are found to be unstable.

   Forest Service guideline:

   Defer two areas where mainstream channels lie at foot of valley walls on unstable soils (guideline #16).

   Resurvey findings:

   The two areas referred to above are shown on the enclosed map by the number 1. On both east fork and west fork these areas are bisected by access roads. We could not get up the main spur (west fork) far enough to see what the effect of the road placement has been due to a loading operation in the road. On Echo Spur the east branch of the east fork is very braided along the road. While this condition existed prior to road construction it is felt construction so close to the stream could trigger channel shifting. The road passes within forty feet of the stream for approximately 400 feet.

   While logging has not occurred in the area requested to be deferred, road has been constructed near this section of unstable stream and the initial recommendation has only been partially effective.

2. Sport Fish recommendation:

   Road construction along streams should be kept to a minimum to reduce sedimentation.

   Forest Service guideline:

   Protect stream banks and tributaries during logging. No logging across identified fish streams (guideline #17).

   Resurvey findings:

   Most of the road observed during the resurvey did not parallel streams but crossed them at right angles. Notable exceptions were

1) the east branch of the east fork (mentioned above), and 2) culvert number 5 on echo spur. While fish were not documented here, the stream runs parallel to the road, in gutter fashion, upstream from the road for 300 feet.

This is believed to be a non-fish stream.

Culvert number one was the only definite fish stream with evidence of logging accross it. Approximately 350 feet of stream is covered with debris from an older operation. This slash may be blocking the movement of Dolly Varden since fish were trapped up to a point about 100 feet below the culvert but none were found above the culvert. No natural barriers were observed from the culvert to where fish were trapped.

3. Sport Fish recommendation:

Check falls at various flows for evaluation of stream improvement project.

Forest Service guideline:

Study feasibility of blasting resting pools on falls of west fork (guideline #18).

Resurvey findings:

Speaking with Forest Service R.M.A. Fred Ziegler and fishery biologist Bill Parr gave the information that the falls on the east fork of the North Thore were looked at for possible stream improvement work. This stream was not felt to be of high enough priority to warrant such attention.

Evidently the west fork falls have not been similarly surveyed. The original Sport Fish recommendation is thus partially effective.

4. Sport Fish recommendation:

If logging along main forks or its tributaries, fell and yard trees away from streams to protect stream banks and bottom.

Forest Service guideline:

Protect stream banks and tributaries during logging. No logging acrcss identified fish streams (Guideline #17).

Resurvey findings:

This point is covered under 2. above. It was documented that at least one fish stream was felled into and probably yarded across. It should also be stressed that the other three streams with logging debris in them feed fish streams and the potential exists for sediment to travel downstream.

Despite recommendations, fish streams as well as non-fish streams are still having logging debris introduced into them and being logged across.

5. Sport Fish recommendation:

Defer logging areas visible from Snakey Lakes until techniques are developed which will eliminate visual disturbance.

Forest Service guideline:

The south facing slope of the major land-form north of Snakey lakes is to be deferred from cutting during the first entry; the south face of the landform separating the two main forks is to be given full landscape management considerations (guideline #s 1 and 2).

Resurvey findings:

No cutting was observed on the major landform north of the Snakey lakes. Thus far, the recommendation is considered effective.

The landform between the forks of the North Thorne River is currently being logged to approximately the 800 foot level in what appears to be conventional clearcut methods. It is not known if this cut will be visible from the Snakey lakes. However, the cut was not visible from the West Spur near the Snakey lakes.

The recommendation is felt to be effective.

EVALUATION OF CULVERTS

A total of five culverts were examined to determine their ability to carry water without impeding fish passage. The culverts were selected on the basis of the stream 1) haveing enough flow to serve as fish habitat and 2) having a gradient that would not act as a blockage to fish movement. A sixth culvert was included to note a potential sedimentation problem and "culvert number 0" is a location where a culvert should have been used.

Fry traping data is inconclusive as to the culverts ability to consistently pass rearing fish. It should be noted that trap number 3, where fish were trapped above the culvert had no drop, but trap number 2, having fish below but not above the culvert, had a drop of only 3 cm.

Culvert Number	Length of Trap set	Catch Above Culvert	Catch below Culvert	Description of Conditions
1	18 hours	0	0	3 cm drop, some scouring.
2	3.5 hours	0	1 D.V.	3 cm drop, no scouring.
3	13.5 hours	4 D.V.	0	No drop, silt & sand deposited to sides of culvert, 4 cm scour in front of culvert.
4	Non-fish stream	Not trapped		Loose rock and gravel on bank of stream capable of silt problem.
5	2 hours	0	0	10 cm drop. Slash and logs in stream just below culvert.
6	No set made			200 to 300 feet of channel that has been felled into and yarded across.
0	18 hours	0 (above road)	8 D.V.(below road)	No culvert here. Road has back up stream into woods.

ADDITIONAL OBSERVATIONS

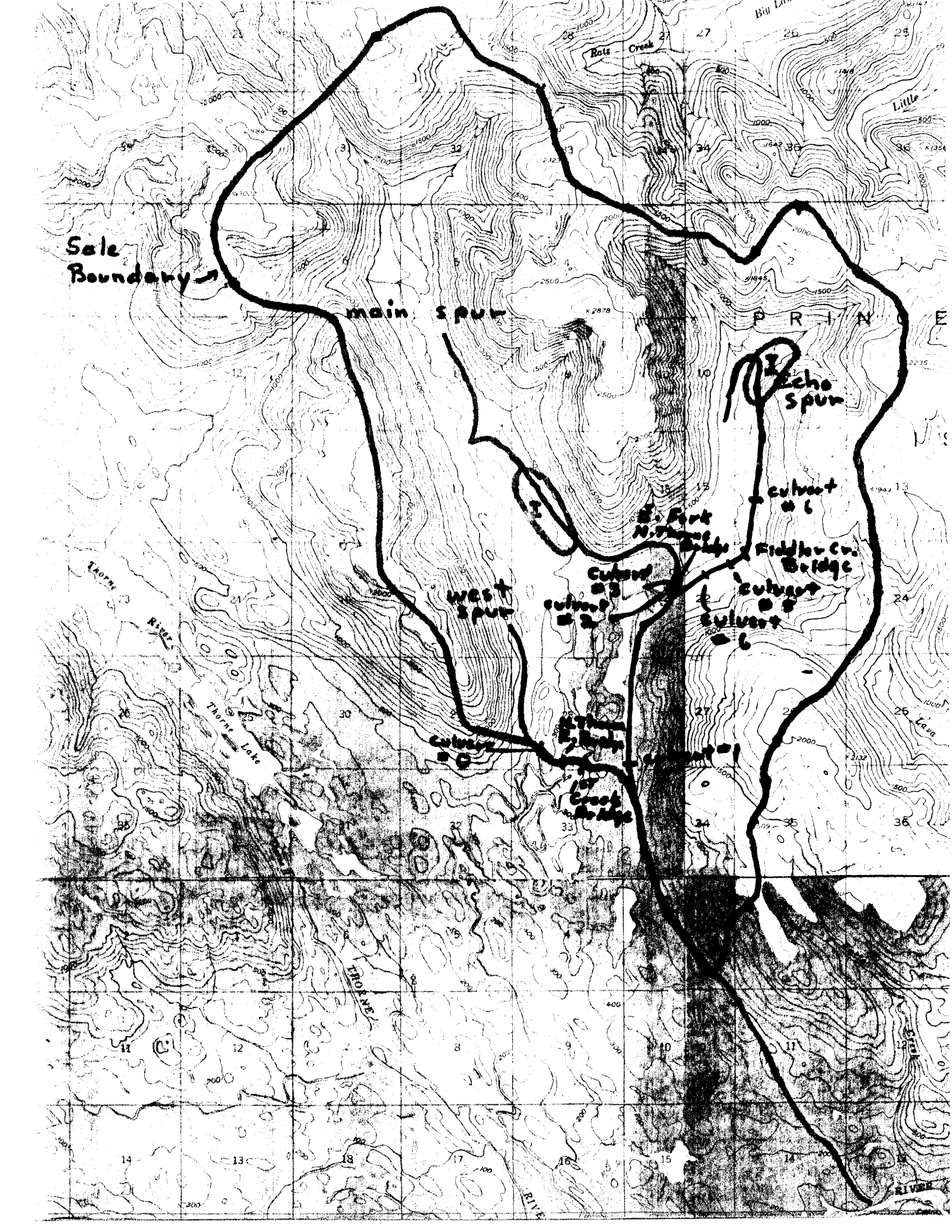
Items not specifically identified druing initial surveys were noticed during the resurvey. A list of these follows.

1. The "first creek bridge" on the West Spur has no brow logs. In addition the sill logs of the bridge are laying in the water for the length of the bridge. Since this may become a permanent bridge both these situations should be corrected.

2. The North Thorne River bridge on the west spur is encroaching on the river channel. While the stringer logs are approximately 55 feet long, the sill logs rest in the water and constrict the flow of the river.

3. The East Fork North Thorne River bridge is an example of good construction. Sill logs are well on the bank and the flow is constricted only to a minor degree.

4. While the Fiddler Creek bridge has brow logs the space between them and stringer logs is great enough to permit introduction of much material. Encroachment by fill material into the stream channel was noticed.


Sale Boundary
main spur
Echo Spur
culvert #6
Fiddler Cr. Bridge
culvert #5
culvert #4
culvert #3
culvert #2
culvert #1
west spur
Thorne River
Thorne Lake
THORNE
RIVER